Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A single crystal pulling apparatus for a metal fluoride, comprising:

a chamber constituting a crystal growth furnace;

a crucible provided in the chamber for filling with a molten solution of a single crystal material;

a melting heater provided to surround the crucible;

a vertically movable single crystal pulling bar for attaching a seed crystal on a tip and adapted to come in contact with the molten solution of the single crystal material in the crucible;

a heat insulating wall provided in the chamber to surround at least a peripheral side portion of a single crystal pulling region in an upper part of the crucible;

a ceiling board for closing an opening portion of an upper end in an upper part of the heat insulating wall; and

a single crystal pulling chamber surrounded by the heat insulating wall and the ceiling board, wherein the single crystal pulling chamber is defined by a single crystal pulling region which verticxally extends from an upper end of the crucible to a height that an upper end of the single crystal of a metal fluoride to be grown reaches at the end of pulling, terminating at a location below said ceiling board; and

wherein the ceiling board is provided with at least an inserting hole for inserting the single crystal pulling bar, and the ceiling board has a coefficient of thermal conductivity in a direction of a thickness of the ceiling ~~board is~~ board of 1000 to 50000 $W/m^{2}\cdot K$.

2. (Original) The single crystal pulling apparatus for a metal fluoride according to claim 1, wherein a coefficient of thermal conductivity in a direction of a thickness of the heat insulating wall is 100 $W/m^{2}\cdot K$ or less.

3. (Previously Amended) The single crystal pulling apparatus for a metal fluoride according to claim 1, wherein the ceiling board is a graphite plate.

4. (Previously Amended) The single crystal pulling apparatus for a metal fluoride according to claim 1, wherein the ceiling board is positioned in a higher place than an upper end of the crucible by 50 to 500% of a maximum inside diameter of the crucible.

5. (Previously Amended) The single crystal pulling apparatus for a metal fluoride according to claim 1, wherein a total opening area of apertures formed on the ceiling board is 5 to 60% of an opening area of an upper end in a circular enclosure of the heat insulating wall.

6. (Previously Amended) The single crystal pulling apparatus for a metal fluoride according to claim 1, wherein the metal fluoride is calcium fluoride.

7. (Previously Amended) The single crystal pulling apparatus for a metal fluoride according to claim 1, wherein the crucible has a inside diameter of 11 cm or more.